

ABSTRACT OF THE DISCLOSURE

An electrochemical device and a method for the preparation thereof, the electrochemical device having a high catalyst utilization efficiency including a gas diffusion electrode formed of a carbonaceous material and having a catalyst formed on at least a portion of its surface, and a proton conducting film provided in contact with one surface of the gas diffusion electrode, wherein the amount of the catalyst formed on the surface of the carbonaceous material contacting the proton conducting film is lesser in amount than on the surface of the carbonaceous material that is not contacting the proton conducting film, thereby appreciably increasing catalyst utilization efficiency and rendering it possible to elevate the energy efficiency of the electrochemical device.

10967310-092801